#### PATENT COOPERATION TREACY

From the INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

То:		PCT	
Priapantja, Cita C. BIRO OKTROI ROOSSENO	THE CUTTO OF THE		
Kantor Taman A-9 Unit C1 - C2 J1. Mega Kuningan, Kuning Jakarta 12950	0310 09 29 Tgl.:	OF THE INTERNATIONAL PRELIMINARY.  EXAMINATION REPORT	
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Applicant's or agent's file reference PCT-11.01		IMPORTANT NOTIFICATION	
International application No. PCT/IB01/01198	International filing date (d 29.06.2001	Priority date (day/month/year) 29.06.2001	
Applicant WIJAYA, Heru, Prasanta			

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
- 2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- 3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

#### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:



European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 · **Authorized Officer** 

Pierre, L

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### **PCT**

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

CT-11/0	or agent's file reference 1	FOR FURTHER ACTION	FOR FURTHER ACTION  See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)		
THE THE PERSON OF THE PERSON O		International filing date (day/monti			
		29.06.2001	29.06.2001		
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. This	s international preliminary of the hority and is transmitted to	examination report has been prepar the applicant according to Article 3	red by this International Preliminary Examining 6.		
. This	s REPORT consists of a to	otal of 4 sheets, including this cover	r sheet.		
⊠	hoon amended and are	the basis for this report and/or sneed the ction 607 of the Administrative Instruction	of the description, claims and/or drawings which have ets containing rectifications made before this Authority auctions under the PCT).		
, i ne	ese annexes consist of a to	otal of 1 shoots.			
3. Thi	e report contains indication	ns relating to the following items:			
	s report contains malouno				
	Basis of the opinion				
I H	<ul><li>☑ Basis of the opinion</li><li>☐ Priority</li></ul>	on			
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# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/IB01/01198

Ь,	Bas	is of the report			The state of the s	
1.	With regard to the <b>elements</b> of the international application (Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)):					
				•		
	Des	cription, Pages				
	1-6	•	as originally filed			
				**************************************		
	Clai	ims, Numbers			و در و هو روستان و معادر در م در معادر در	
	1-6		received on 04.11.2002 wi	th letter of 05.04.2002	•	
	_					
		wings, Sheets				
	1/5-	5/5	as originally filed	•	•	
	With regard to the <b>language</b> , all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.					
	These elements were available or furnished to this Authority in the following language: , which is:					
		the language of a tra	anslation furnished for the purposes	of the international search	(under Rule 23.1(b)).	
		the language of publ	lication of the international applicati	on (under Rule 48.3(b)).		
		the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).				
3.	With inte	With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:				
		contained in the inte	rnational application in written form			
		filed together with th	e international application in compu	iter readable form.		
		furnished subsequer	ntly to this Authority in written form.			
		furnished subsequer	ntly to this Authority in computer rea	adable form.		
		The statement that t in the international a	he subsequently furnished written s pplication as filed has been furnish	sequence listing does not goed.	beyond the disclosure	
		The statement that t listing has been furn	he information recorded in compute ished.	er readable form is identical	to the written sequence	
4.	The	amendments have r	esulted in the cancellation of:			
	□.	the description,	pages:			
		the claims,	Nos.:			
		the drawings,	sheets:			
				•	•	

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/IB01/01198

5. 🗆	This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).
	(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Yes: C

Claims

1,2,5,6

No: Claims

Claims 3, 4

Yes: Claims No: Claims

S

3, 4

Industrial applicability (IA)

Inventive step (IS)

Yes: Claims

1-6

No: Claims

2. Citations and explanations

see separate sheet

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1. The subject-matter of independent claims 1 and 5 is not new over the prior art (Article 33(2) PCT).

The document **DE-A-3002325** (D1) is regarded as being the closest prior art to the subject-matter of claim 1 and 5, and obviously discloses an air stirring blade (10) (see D1: figures 1, 2; page 12, lines 8-13, 20-21; page 15, lines 24-26; page 16, lines 1-2) according to these claims. While the applicant's observations have been considered ("the geometric shape of the two inventions shown in figures 1 and 2 in D1 are greatly different), the previously expressed opinion is nevertheless maintained.

The features of dependent claims 2 and 6 are also shown in D1. Dependent claims 3, 4 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, as only slight constructional changes are therein suggested which come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can be readily contemplated in advance.

2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.
Independent claim 1, 5 are not in the two-part form in accordance with Rule 6.3(b) PCT, with those features known in combination from the prior art (document D1) being placed in the preamble (Rule 6.3(b)(i) PCT) and with the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).

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PCT/IB01/01198, REVISED CLAIMS

19 APR 2002

 An air-stirring blade to be mounted within an internal combustion engine, characterized by,

a cylindrical body (1) whose mid portion is provided with blade (2) constructed in such a way that the inner side of the blade (2a) takes the form of stirred groves with dip angle (3) of about 10° to 80° or typically 30° with respect to vertical axis of the body, and this blade makes a twisted center tunnel as inner passage; and

the outer side of the blade (2b) which is of the same shape with the inner side (2a) thereof, the existence of two or more, generally four tangent lines (4) between blade (2) and body (1) which form channel of cap-shaped cross section (5) which is twisted along body, as outer passage.

- 2. Air-stirring blade in claim 1 whose shape has been modified so as to show a blade (2) only after the omission of the cylindrical parts of its body (1)
- Air-stirring blade in claim 1 which is modified as a body (1) equipped with additional lip (6)
- 4. Air-stirring blade in claim 1 which modified in such so that the blade is integrally constructed with the air channel and acts a joint for air channel.
- 30 5. An air-stirring blade to be mounted within an internal combustion engine, characterized by,

a blade (2) constructed in such a way that the inner side of the blade (2a) takes the form of two or more of coiled grooves with each coiled grooves has dip angle (3) of about 10° to 80° or typically 30° with respect to vertical axis of the body, and this blade makes a twisted center tunnel as inner passage; and

the outer side of the blade (2b) which is of the same shape with the inner side (2a), and if inserted to the air duct will has tangent lines (4) between blade (2) and air duct which form channel which is twisted along body of air duct, as outer passage.

6. Air-stirring blade in claim 1 and claim 5 which can be made of nonmetal materials such as polymer or metal.